

Amendments to the Specification

Responding to the Office Action, Paragraph 6b, in Table A, pages 11-14, delete the right column entitled "Ref." In its entirety.

In paragraph "[0118]", first line: insert after "PNA": -- (Peptide nucleic acids (PNA) are DNA mimics with a pseudopeptide backbone. PNA is an extremely good structural mimic of DNA (or RNA), and PNA oligomers are able to form very stable duplex structures with Watson-Crick complementary DNA, RNA (or PNA) oligomers, and they can also bind to targets in duplex DNA by helix invasion.) --

Responsive to paragraph 6a of the Office Action insert sequence numbers SEQ. ID No.s in paragraphs 169, 171, and 173 of the specification:

Para 169, line 5, before "5'" insert --SEQ. ID NO. 1--.

Para 169, line 6, before "5'" insert --SEQ. ID NO. 2--.

Para 171, line 4, before "5'" insert --SEQ. ID NO. 3--.

Para 171, line 5, before "5'" insert --SEQ. ID NO. 4--.

Para 173, line 2, before "5'" insert --SEQ. ID NO. 5--.

Paragraph [0186]: Cancel in its entirety and replace with:

--Figure 5 shows repeated Cu IDA stripping of RNA from plasmid.

EtBr stained 1% agarose gel of Cu (II) charged Chelating Sepharose matrix batch adsorption experiment of alkaline lysed E. coli with plasmid pBGS19luxwt. Lane 1 is the original lysate; Lane 2 is lysate contacted with non-charged IDA matrix; Lane 3 is the unbound material after a single batch adsorption; Lane 4 is Lane 3 after exposure to fresh matrix, Lane 5 similarly is Lane 4 after exposure to fresh matrix and Lane 6 is Lane 5 after exposure to fresh matrix.--

[To conform with original paragraph 0058]

Cancel para 0189 in its entirety and replace with:

--[0189] The nucleic acid discrimination achieved with IMAC suggests application of the method to the purification of plasmid DNA from RNA-rich bacterial lysates. Figure 8 shows repeated Cu(II) IDA stripping of RNA from a plasmid DNA-containing alkaline lysate. Ethidium bromide stained 1% agarose gel of Cu(II)-charged Chelating Sepharose batch adsorption of *E. coli* alkaline lysate with plasmid pBGS19luxwt. 1 mL of an IPA-precipitated alkaline lysate resuspended in 1 mL IMAC running buffer was contacted with 50 uL of Chelating Sepharose per batch experiment. Lane 1 is the original lysate; Lane 2 is lysate contacted with metal-free IDA matrix; Lane 3 is the unbound material after a single batch adsorption with Cu(II)-charged matrix; and, each of Lanes 4-6 is the previous lane after exposure to fresh matrix.—

[To conform with original paragraph 0061]